

Amendments to the Claims

Please cancel Claims 19 and 21 without prejudice or disclaimer.

Please amend Claims 1-18, 20 and 22-38 to read as follows.

1. (Currently Amended) A method of extracting recognizing an image area of interest in an inputted image from compressed image data through a process for reconstructing decompressed image data from the compressed image data, comprising the steps of:

acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data; and

searching for the image area of interest in from the inputted compressed image data using the acquired spatial frequency information and chromaticity information.

2. (Currently Amended) A method according to claim 1, wherein said inputted image comprises compressed image data; further comprising a step of decompressing the compressed image data, and wherein in said acquiring step, the spatial frequency information and chromaticity information are acquired from the decompressed image data.

3. (Currently Amended) method according to claim 2, further comprising the steps of:  
acquiring quantization parameters for decompression; and  
stopping extraction of the image area of interest in accordance with said the acquired quantization parameters.

4. (Currently Amended) A method according to claim 2, wherein said the compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit map data.

5. (Currently Amended) A method according to claim 1, wherein said searching step comprises the steps of:

extracting consecutive blocks having a predetermined range of chromaticity value values; and

determining whether or not said the extracted consecutive blocks are the image area of interest based on an average of spatial frequency value values within said the extracted consecutive blocks.

6. (Currently Amended) A method according to claim 5, wherein a threshold level for determining whether or not said the extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

7. (Currently Amended) A method according to claim 5, wherein said searching step further comprises a step of selecting candidates of the image area of interest based on a number of said the extracted consecutive blocks.

8. (Currently Amended) A method according to claim 7, wherein a threshold level for selecting candidates of the image area on of interest is changed in accordance with a size of image to be extracted.

9. (Currently Amended) A method of reconstructing an recognizing an image area of interest from compressed image data and decoding image data from inputted the compressed image data, through a process for reconstructing decompressed image data from the compressed image data, comprising the steps of:

extracting recognizing an image area of interest in an inputted image having said inputted from the compressed image data; and

reconstructing an image with correction of image data in the image area of interest to a predetermined value,

wherein said extracting recognizing step comprising comprises the steps of:

acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data; and

searching for an the image area of interest in an inputted from the compressed image data using the acquired spatial frequency information and chromaticity information.

10. (Currently Amended) A method according to claim 9, wherein said the predetermined value comprises a predetermined chromaticity value.

11. (Currently Amended) A method according to claim 9, wherein said ~~extracting~~  
recognizing step further comprises a step of decompressing the ~~inputted~~ compressed image  
data, and wherein in said acquiring step, the spatial frequency information and chromaticity  
information are acquired from the decompressed image data.

12. (Currently Amended) A method according to claim 11, further comprising the  
steps of:

acquiring quantization parameters for decompression; and  
stopping extraction of the image area of interest in accordance with ~~said~~ the acquired  
quantization parameters.

13. (Currently Amended) A method according to claim 11, wherein ~~said~~ the  
compressed image data comprises JPEG image data and the decompressed image data  
includes DCT coefficients and bit map data.

14. (Currently Amended) A method according to claim 9, wherein said searching step  
comprises the steps of:

extracting consecutive blocks having a predetermined range of chromaticity value; and  
determining whether or not ~~said~~ the extracted consecutive blocks are the image area of  
interest based on an average of spatial frequency value values within ~~said~~ the extracted  
consecutive blocks.

15. (Currently Amended) A method according to claim 14, wherein a threshold level for determining whether or not said the extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

16. (Currently Amended) A method according to claim 14, wherein said searching step further comprises a step of selecting candidates of the image area on of interest based on a number of said the extracted consecutive blocks.

17. (Currently Amended) A method according to claim 16, wherein a threshold level for selecting candidates of the image area on of interest is changed in accordance with a size of image to be extracted.

18. (Currently Amended) A computer program stored in a computer-readable medium for making causing a computer to execute the method according to claim 1.

19. (Canceled)

20. (Currently Amended) A computer program stored in a computer-readable medium for making causing a computer to execute the method according to claim 9.

21. (Canceled)

22. (Currently Amended) An image processing apparatus of extracting for recognizing an image area of interest in an inputted image from compressed image data through a process for reconstructing decompressed image data from the compressed image data, comprising:

first acquiring means for acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data;  
and

searching means for searching for the image area of interest in the inputted image from the compressed image data using the spatial frequency information and chromaticity information acquired by said first acquiring means.

23. (Currently Amended) An apparatus according to claim 22, wherein said inputted image comprises compressed image data; further comprising decompressing means of for decompressing the compressed image data, and wherein in said acquiring step, the spatial frequency information and chromaticity information are acquired from the decompressed image data.

24. (Currently Amended) An apparatus according to claim 23, further comprising:  
second acquiring means for acquiring quantization parameters for decompression; and  
stopping means for stopping extraction of the image area of interest in accordance with said the quantization parameters acquired by said second acquiring means.

25. (Currently Amended) An apparatus according to claim 23, wherein said the compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit map data.

26. (Currently Amended) A method An apparatus according to claim 22, wherein said searching means comprises:

extracting means for extracting consecutive blocks having a predetermined range of chromaticity value values; and

determining means for determining whether or not said the extracted consecutive blocks are the image area of interest based on an average of spatial frequency value values within said the extracted consecutive blocks.

27. (Currently Amended) An apparatus according to claim 26, wherein a threshold level for determining whether or not said the extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

28. (Currently Amended) An apparatus according to claim 26, wherein said searching means further comprises selecting means for selecting candidates of the image area on of interest based on a number of said the extracted consecutive blocks.

29. (Currently Amended) An apparatus according to claim 28, wherein a threshold

level for selecting candidates of the image area on of interest is changed in accordance with a size of image to be extracted.

30. (Currently Amended) An image processing apparatus for reconstructing an recognizing an image area of interest from compressed image data and decoding image data from inputted the compressed image data, through a process for reconstructing decompressed image data from the compressed image data, comprising:

extracting recognizing means for extracting recognizing an image area of interest in an inputted image having said inputted from the compressed image data; and

reconstructing means for reconstructing an image with correction of image data in the image area of interest to a predetermined value,

wherein said extracting recognizing means comprising comprises:

first acquiring means for acquiring spatial frequency information and chromaticity information for respective predetermined blocks from the inputted compressed image data; and

searching means for searching for an the image area of interest in an inputted from the compressed image data using the acquired spatial frequency information and chromaticity information.

31. (Currently Amended) An apparatus according to claim 30, wherein said the predetermined value comprises a predetermined chromaticity value.

32. (Currently Amended) An apparatus according to claim 30, wherein said extracting recognizing means further comprises decompressing means for decompressing the inputted compressed image data, and wherein said first acquiring means acquires the spatial frequency information and chromaticity information from the decompressed image data.

33. (Currently Amended) An apparatus according to claim 32, further comprising : second acquiring means for acquiring quantization parameters for decompression; and stopping means for stopping extraction of the image area of interest in accordance with said the acquired quantization parameters.

34. (Currently Amended) An apparatus according to claim 32, wherein said the compressed image data comprises JPEG image data and the decompressed image data includes DCT coefficients and bit map data.

35. (Currently Amended) An apparatus according to claim 30, wherein said searching step means comprises the steps of:  
extracting means for extracting consecutive blocks having a predetermined range of chromaticity value values; and  
determining means for determining whether or not said the extracted consecutive blocks are the image area of interest based on an average of spatial frequency value values within said the extracted consecutive blocks.

36. (Currently Amended) An apparatus according to claim 35, wherein a threshold level for determining whether or not said the extracted consecutive blocks are the image area of interest is changed in accordance with a size of image to be extracted.

37. (Currently Amended) An apparatus according to claim 34, wherein said searching step means further comprises a step of means for selecting candidates of the image area on of interest based on a number of said the extracted consecutive blocks.

38. (Currently Amended) An apparatus according to claim 37, wherein a threshold level for selecting candidates of the image area on of interest is changed in accordance with a size of image to be extracted.